



Regrow

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CARTILAGE REGENERATION: A BIOLOGICAL KNEE REPLACEMENT

Surgeons always try to delay knee replacement in younger patients due to its various drawbacks. Correspondingly, they continue to look for good effective alternative options to artificial knee replacement surgery. One such option is the concept of the 'biological knee replacement' – **Autologous Chondrocyte Implantation (ACI)**.

CASE OVERVIEW: 17/M Athlete was referred to Orthopedic Specialist Hospital in Mumbai, with complaints of pain, swelling and episodic locking in both knees and R-ankle (upon) twisted during a basketball match. On clinical & radiological evaluation, Osteochondritis Dissecans (OCD) of Medial Femoral Condyle (MFC) of both knees and lateral aspect of the talar dome in R- ankle was found.

ACI was done for ankle & knee defect in Sep 2009 by the surgeon.

It has been over **1.6 years** since the surgery. The patient has complete resolution of all symptoms and an excellent return of knee and ankle range and function.



Pre-op MRI: Right Knee



Pre-op MRI: Right Ankle



Post-of MRI: Right Knee



Post-of MRI: Right Ankle

MOCART scoring done on post-op MRI, a score of 100 was obtained which clearly proves ACI as the best option for large cartilage defects

MOCART Scoring: Post-op MRI result as compared to pre-op MRI

VARIABLE	FINDING
Degree of defect repair & defect filling	Complete (on a level with adjacent cartilage)
Integration to border zone	Complete (integration with adjacent cartilage)
Surface of the repair tissue	Surface intact
Structure of the repair tissue	Homogeneous
Subchondral lamina	Intact
Subchondral bone	Intact
Effusion	No

DENTAL SOCKET PREPARATION

CASE OVERVIEW: 68/M had extraction of 1st molar and 2nd pre-molar infected tooth of upper right side jaw for socket preparation and subsequent implantation of **Theraform™ dental plug**.

Defect size: 1st defect (1st molar): 10mm x 8mm | 2nd defect (2nd pre-molar): 7mm x 4mm

TREATMENT: Atraumatic extraction of teeth is done maintaining integrity of the socket.

- **Absorbable Atelocollagen Plug (8x25mm)** was used in freshly extracted teeth socket to prevent soft tissue in-growth.
- After placement in the socket, a cross suture or figure of 8 is placed to secure the plug.

**Theraform™
FOR DENTAL WOUNDS**



Tooth extracted



Theraform dental plug



Application of Theraform Dental plug



Day 3 post Theraform Application



Day 14 post Theraform Application

DOCTOR'S COMMENT: "Absorbable atelocollagen used in freshly extracted teeth leads to better bone volume for enhancing future implant placement. The absorbable atelocollagen plug should be used when all four walls of the specific socket are intact. In case where there is collapse or absence of bony wall, bone grafting and application of collagen membrane is indicated. Healing is enhanced since it prevents dislodgment of blood clot. Implant can be carried out after 6-8 weeks of placement", *Dr. Udatta Kher, M.D.S Head of Dental Department K.J. Somaiya Medical College.*

UMBILICAL CORD BLOOD (UCB) TRANSPLANTATION SUCCESS

During the past few years, due to the successful cord blood researches, and transplant procedures, the statistics on UCB transplant has shown increasing positive results.

Beginnings

Umbilical cord blood has been approved for use by the FDA and other authorities since the late 1980's.

The first umbilical cord blood stem cell transplant was successfully performed in 1988 on a five-year-old boy who was suffering from Fanconi's anemia. The operation was successful.

Recent numbers

Recent estimates suggest that in India, about 50,000-60,000 cord blood units have been banked in the past five-six years. This figure is poised to grow in the years to come.

The National Academies, USA reported that more than 20,000 Americans have undergone a successful UCB transplant in the past few years.

New private cord blood banks are being established all over India in an attempt to use their knowledge, research and storage facility to benefit the Indian population. What seemed like a dream few years back is now becoming reality.

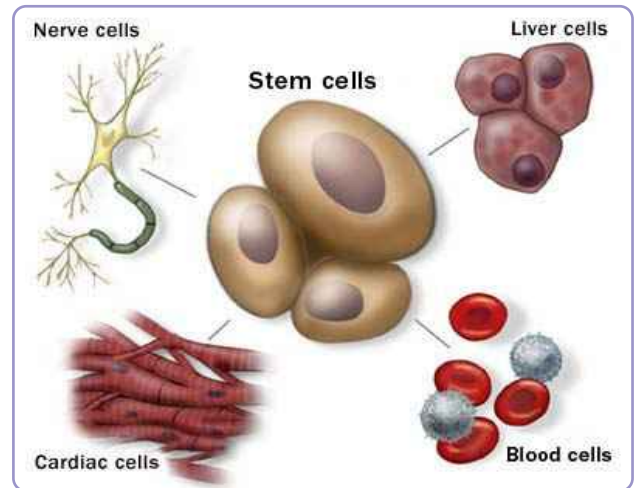


With more than 80,000 babies being born per day, India is on the brink of being the largest source for umbilical cord blood in the world.

The use of umbilical stem cells for therapeutic purposes can ensure better lives.

Comparison of stem cell sources

	Cord Blood	Adult	Embryo
Capacity to differentiate into various cell types	✓	✓	✓
Highly proliferative	✓		✓
Very low risk of viral contamination	✓		✓
Immediately available	✓	✓	
Allow for autologous transplants	✓	✓	
Established/proven treatment in human patients	✓	✓	



Umbilical Cord Stem Cell Uses

REGROW® HOSPITAL NETWORK & ACTIVITIES

Mother's Day Celebration at Artemis Hospital

Babycell™ in association with Artemis Healthcare had organized Mother Care Programme as a part of Mother's Day Celebration on 8th May 2011. The event was a action packed & fun filled event which was successfully executed by the Babycell™ team with the support of Artemis Hospital. Babycell™ cord blood banking services are exclusively available at the NCR & Artemis Hospital.



Babycell™ - Annual meet

Babycell™ – Annual Meet was one of the most widely recognized pan-science events, with hundreds of opportunities to acquire knowledge by sharing each ones experience. Babycell™ is now present in more than 15 cities across India.

Aurangabad CME

A CME was organized by RMS Regrow on 25th March 2011 at Aurangabad to emphasize the scope of Extracellular Matrix: Theraform™ & Autologous Cultured Cell: OSSRON™ Technology in Reconstructive Surgery. Specialties like Plastic Surgery, Maxillofacial Surgery and Orthopedic Surgery were present on the occasion. Plastic Surgeons, Dr. Samir Kumta and Dr. Sailesh Ranade from Mumbai graced the occasion. Distinguished Plastic Surgeons from Aurangabad, Dr. Jiten Kulkarni and Dr. Ramakant Bembde emphasized the need for innovation to advance the scope of reconstructive surgery. The audiences were enthused & asked for product training and availability.



REGENERATIVE MEDICAL SERVICES PVT. LTD.